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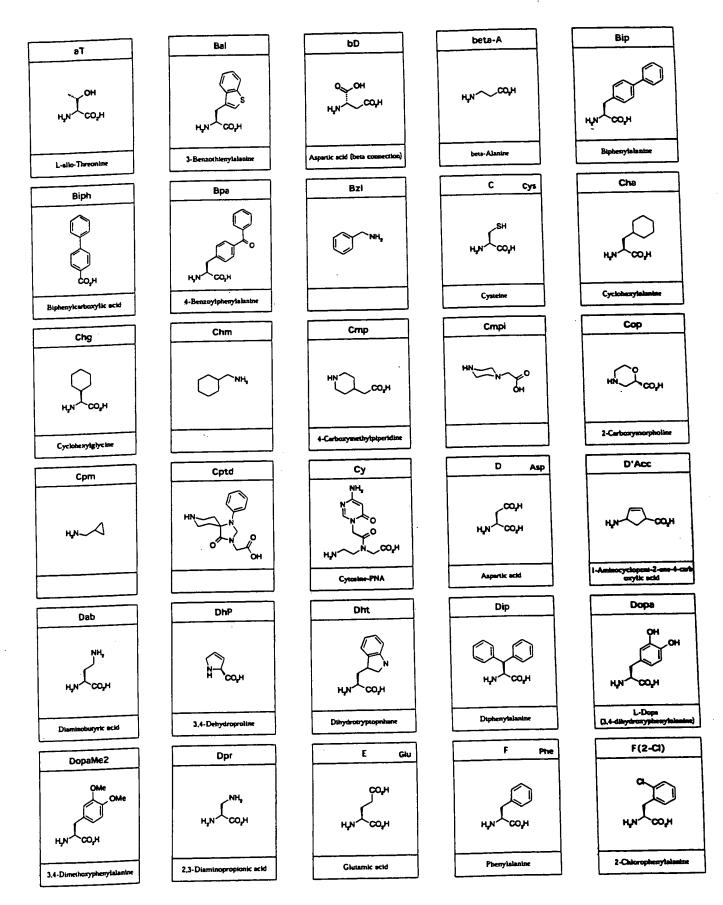
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PEPTIDE-BASED MULTIMERIC TARGETED CONTRAST AGENTS

Figure 1

	(aMe)T	(aMe)Y	1 Nai	2Nai
(aMe)C	(awe) i	(ane)·		
HC. SH	HYC COH	H ¹ C COH	н,000 м,н	_H,W _ CO,H
alpha-Methylcysteine	alpha-Methylthreonine	alpha-Methyltyrosine	1-Naphthylalanine	2-Naphthylalanine
2Pal	2Pal	2Thi	ЗАтр	3Mtb
H _Y N CONH	ни сон	ни соч	N NH,	H,CO NH,
2-Pyridylalanine	2-Pyridylalanine	2-Thiestylalanine		
3Pal	3Pal	3Tfb	3Thi	4Amp
ни сон	HAN COOH	F.C. NH,	нуй содн	NOT NOTE
3-Pyridylalanine	3-Pyridylalanine		3-Thienylalanine	
4Mtb	4Pai	4Tfb	A Ala	Acc
H,COO NH,	HAN COOH	F.C. NH.	нух∕оон	нум-С>жүн
	4-Pyridylalanine		Alanine	I-Aminocyclopentane-3-carbox ylic scid
	Acmp	Ad	Ahpp	Aib
Achc OH NH,	HÁN W O	NH, N N COH	HN OH OH	ниҳ∞и
		Adenosine-PNA		alphe-Aminobobutyric acid
	Amf	Amh	Amp	App
Alig H _M CO _M	H'M CO'H	ни он	NH,	HAT SOH
Allyighycine	4-Aminomethylphenylalanine	4-AMINO-6-METHYL HEPTANOIC ACID	4-Aminoproline	

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F(2-CN)	F(2-F)	F(2-Me)	F(3,4,5-F3)	F(3,4-Cl2)
нул соўн	нум сорн	ни ф.	H _M CO _M	ifty coty
2-Cyanophenylalanine	2-Fluorophenylalanine	2-Methylphenylulanine	3,4,5-Trifluorophenylalanine	3,4-Dichlorophenylalanine
F(3,4-F2)	F(3,5-F2)	F(3-CF3)	F(3-CI)	F(3-CN)
F F H _A N CO ₂ H	н, м содн	FF F COOM	H'M_CO'H	HÅN_COO'H
3,4-Diffuorophenylalanine	3,5-Difluorophenylalanine	3-Trifluoromethylphenylalanine	3-Chlorophenylalamine	3-Cyunophenylainnine
F(3-F)	F(3-Me)	F(4-Br)	F(4-CF3)	F(4-CI)
H,W COO,H	нул соди	H _A N CO _A H	HAN COOM	H'M COO'H
3-Fluorophenylalanine	3-Methylphenylalanine	4-Bromophenylalanine	4-Trifluoromethylphenylanaline	4-Chlorophenytalanine
F(4-CN)	F(4-Et)	F(4-F)	F (4-1)	F(4-Me)
HJN COJH	н,000,	нум соодн	нух фун	ни содн
4-Cyanophenylalanine	4-Ethylphenylalanine	4-Fluorophenylalanine	4-lodophenylalanine	4-Methylphenylahanine
F(4-NH2)	F(4-NO2)	F(4-OMe)	F(4-tBu)	F(4-X)
H³N_COÒH	H _A N CO ₂ H	H _J N CO _J H	нум содн	HYW COOTH
4-Aminophenylalanise	4-Nitrphenylalanine	Methylryrosine	4-tert-Butylphenylalanine	4-Substituted phenylalenine
F(F5)	Fua	G Gly	Gu	H His
F F F F F F F F F F F F F F F F F F F	нфофи	н∕л∕-со\н	44 N N N N N N N N N N N N N N N N N N	HJN COJI
Pentafluorophenylalanine	2-Furytalanine	Glycine	Guanosine-PNA	Histidize

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	Hfe	Hmf	Hse	hTyr
H(Bzl)				ОН
		○	ОН	
			ни сон	
H ^{CO} VH	ну√соун	нћи∕соћ	191 554	- HÌN COÙH
			Homoserine	Homotyrosine
N-Benzylhtstidine	Homophenylalanine	4-Hydruxymethylphenylalanine		
Нх	Нур	l lie	lal	lbu
НО	OH .		H-M	HW~
~~~~~~~~	H-coth	ну содн	1	'
	ι ω _σ ,			
	4-Hydroxyproline	Isoleucine		
Hexanoic acid			L Leu	M Met
Igl	Inp	K Lys		
		NH _s		s CH,
	HN	\ \		
нух соди	СОН	ни√соч	нуу соун	ни, сон
нул сол			Leucine	Methicolor
2-Indanylglycine	Isonipecotic ecid	Lysine		
Mamb	MeBip	MeD	MeL	MeR
СОН		LC COCH		Hc A COH
HAN CO	H.C. N. COOH	H²c H COH	Hrc. H. Coth	H
	HOO, CO'H			
m-Aminomethylbenzok acid	N-Methylbiphenylalanine	N-Methylaspartic acid	N-Methylleucine	N-Methylated amino ecid
		n(4-PhBu)G	n(decyl)G	Nbu
mTyr	N Asn	11(4471188)		
он	o l			
	NH,		~~~~t~~~	H.W-~~
ну Сорн	нум∕соун	, ,		
			N-Decylglycine	
meta-Tyrosine	Asperagine	N-(4-Phenylburyl)glycine	(maxy@yanx	
Nip	Nie	пТуг	8v/f	. Om
		óн		NH _a
				\ \ \
HN CO ₂ H	HIN COTH		ни сон	. ну√ ∞ун
	ingri vogri	. h∱v,_coh		
Nipecotic scid	Norteucine	Nortyrosine	Norvaline	Oresithine
1 tarberrar arm	1			

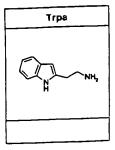
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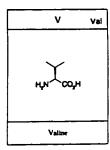
Orn(Ant)	Om(Ben)	Om(Bip)	Om(C12)	Orn(Hyc)
2.	NH	o _o c.	~~~~	
NA COOM	нух соди	ил соди	ни сон	- H ^A CO ^A
N-delta-9-Anthracenecarboxylyl -L-ornithine	N-delta-Benzoyl-L-oratthine	N-delta-4-Phenylbenzoyl-L-orni thine	N-delta-Lauroyl-L-ornithine	N-delta-Hydroctanamoyl-L-orni thine
Orn(iBu)	Orn(Z)	Охр	P Pro	Pen
NH NH	O O O	° COJH	д сол	ни содн
ну√сон	нул Содн	4-Oxoproline	Proline	PeniciDamine
N-delta-isobutytyi-L-ornithine	Benzyloxycarbonyl ornithine	4-cauproux		
Pet	Phg	Pip	Pqa	Prgg
NH ₁	нуй содн	H _{CON}	SMT NOH	ну Соодн
	Phenyighycine	Ptpecolic scid		Propergylglycine
рТ	pY	Q Gin	R Arg	S Ser
HO-6-OH	OH O=P-OH	нум соди	HN COH	ни сол
Phosphothreonine	Phosphoryrosine	Glutamine	Arginine	Serine
S(BzI)	sA	Sta	T The	Taz
ни сон	ну содн °, он °, он	PAN OH OH	нул сори	нул содн
O-Benzylserine	sulphouralanine		Threonine	4-Thissoylalanine
Th	Thp	Tic	Tioe	Tle
H,C NH O COJH	В содн	H CO,H	⟨ _S NH ₃	нусо нун
Thymine-PNA	4-Thiaproline	L-1,2,3,4-Tetrahydroisoquinolii e-3-carboxylic acid		teri-Loucine

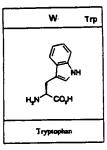
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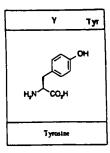
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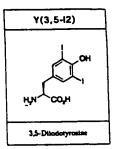
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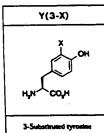












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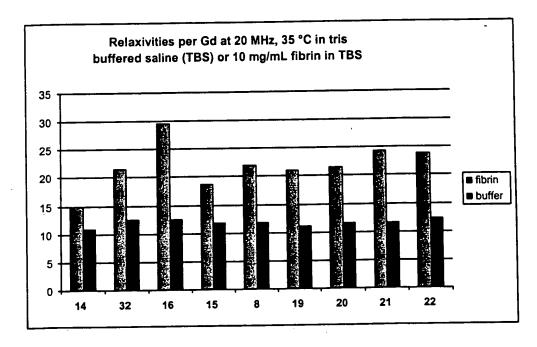


FIG. 2

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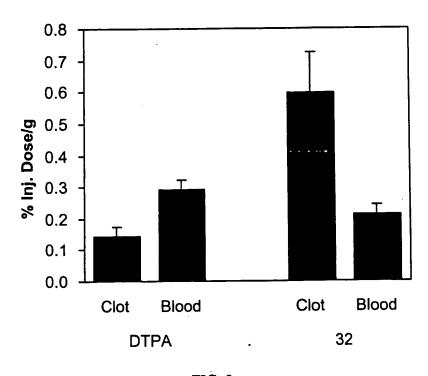
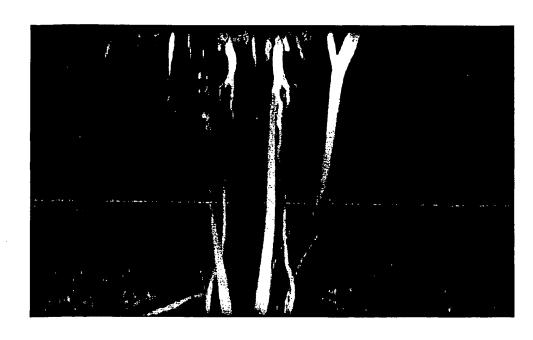
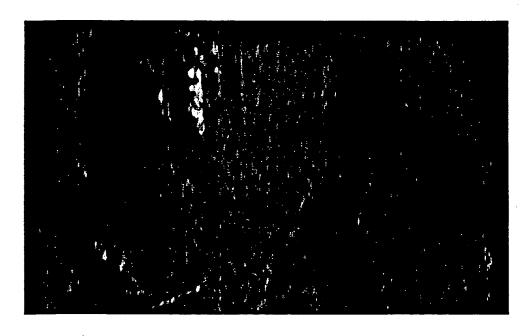


FIG. 3

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